Paper published 1936

Condor 38, 32-36

Species from the So. Cal. Acad. Coll., A5

This excavation located on North bank of the "lake"

for location see letter from V. L. Gilbert 10/12/33 filed under Misc. Mus. Bus.

Ardea herodias, 13

Egretta thula or Florida caerulea, 14

Botaurus lentiginosus, 4

Ciconia maltha, 19

Mycteria (probably not americana), 3

Plegadis guarauna, 3

Insert yellow slip here

Cygnus columbianus, 1 (possibly 2)

Branta canadensis, several (14 large tarsi, maybe of two species)

~~Branta nigricans?~~ (11 small tarsi, 3 species)

sp. new.

Chen hyperboreus?

Anser albifrons

Ducks, 74 large humeri, including Anas platyrhynchos, and probably 2 other species.

24 small humeri, including Nettion carolinense (5) and Cyanoptera (2). Probably the others are of these species also. 1 Gadwall

Cathartes aura, 2

Coragyps occidentalis, 114

Gymnogyps californianus, 53

Vultur clarki, 6

Teratornis merriami, 22

Neogyps errans, 21

Neophrontops americanus, 58

Accipiter cooperi, 4

Buteo borealis, 8 } incomplete count

Buteo swainsoni, 3

Buteo lagopus, 7

Buteo regalis, 10

Circus hudsonius, 6

Species in A5 continued

Spizaëtus grinnelli, 42 — 7

Urubitinga fragilis, ~~13~~ 15 — 3

Wetmoregyps daggetti, 9 — 2

Morphnus woodwardi, 2 — 1

Aquila chrysaëtos, 132 — 20

Haliaëetus leucocephalus, 108 — 11

Polyborus cheriway, ~~137~~ 158 — 12

Falco mexicanus, ~~4~~ 5 — 2

Falco peregrinus? (small) ~~8~~ 12 — 2

Falco sparverius, ~~11~~ 12 — 3

Parapavo californicus, 328 — 30 — 16, 4, 3

Lophortyx californica, 27 — 5

Grus canadensis, 38 39 — 4

Totanus melanoleucus, ~~12~~ 17 — 5

Osyechus vociferus? ~~2~~ 5 — 2

Sandpipers, ~~7~~ 16 (two species) — 6+2

~~Limosa fedoa? 2~~ Squatarola = squatarola — 2 — 1

Recurvirostra americana, ~~2~~ 5 — 1

~~Himantopus americanus, 1~~

Numenius americanus, ~~2~~ 4? — 1

Phaeopus hudsonius, 3 — 1

Larus (Rissa) (size delawarensis or heermanni), 1 — 1

Zenaidura macroura, 4 — 3

Geococcyx californianus, 5 — 2

Tyto alba, 35 — 8

Otus asio, 1 — 1

Bubo virginianus, ~~31~~ 32 — 6

Speotyto cunicularia, 7 — 3

Strix brea? 3 — 1

Asio wilsonianus 11, 9
Asio flammeus 5

Asio, ~~31~~ 16

Colaptes cafer, 1 — 1

Pica pica, 2 — 1

Passerines 13

(2)

146
157
124
281

135
156
291

155
119
274

1020
48
958
2024

5 . 10 20

Revised version pub. 1936
Condor 38; 32-36
(no reprints?)

Further Studies of the Birds of the Rancho La Brea Pleistocne

During the last two years I have spent some time going over a fairly large collection of birds from the Rancho La Brea Pleistocene, which had been given to the Los Angeles Museum by the Southern California Academy of Sciences. This material was excavated by the Academy many years ago, and given to the Museum in 1911, 2 years before the Museum began its own extensive excavations at La Brea. Only recently, ~~however has the greater part of it~~ been in condition while the Museum collections have long since been cleaned, catalogued, the greater part of the Acad material put to study. In the course of studying this material, I have had occasion, also, to make comparisons with specimens in the main Museum collection ~~from La Brea.~~ as well The result is that I now find myself in possession of a few new facts concerning the birds of ~~these interesting asphalt~~ deposits.

Firstly, several species have come to light which have not before been recorded from Rannho La Brea. or which were only tentatively identified The list of these forms follows:

Bodilymbus podiceps, femur no. F5741, from Pit 16.

Note: This ~~record~~ is in addition to the humerus recorded by Miller (1925, p. 71) as Colymbus sp, with the remark that it might be found to belong rather with Podilymbus. I have carefully checked this humerus, also, and find it definitely to belong to Colymbus, though I will not attempt to make the species identification

Butorides virescens, tibia no. F1824, from Pit 61.

Casmerodius albus, tibia no. F560 from Pit 67 and coracoid no. H3695 from Pit 28.

Cygnus columbianus, carpometacarpus and femur from the Southern California Academy excavation.

Anser albifrons, identified from several sepcimens in the So. Calif. Acad. ~~xxxxxxx~~ pit. This species was questionably identified earlier, (Miller, 1912, p. 78) and is now ~~added~~ added definitely to the records.

UC records from RLD not found in SAM coll.

Phaeopus hudsonicus Pit 28 ⌐ acad

Numenius americanus Pits 61, 67, 37 ⌐ acad

Limnodromus griseus - Pit 16

Oxyechus vociferus Pit 36, 16 Acad

Spatula clypeata (?) tentatively by A. Miller
Specimens similar in size & shoveller occur in SAM coll.

Oxyuridesmus lewisi present in SAM pits (Pit?)

All extinct sp. (except Cathartornis gracilis + Euphagus magnirostris) have been found in Acad Pit.

[Cletar atricapillus, recorded by Compton from UC coll?) not found in SAM coll.

Note: since found? 1960?

Chen hyperboreus, identified from the So. Calif. Acad. pit. Both this species and Anser albifrons are undoubtedly present in the main Museum collection also.

Branta minuscula; This species described by Wetmore (from the Uppper Pliocene?, Lower Pleistocene? of Benson Arizona, is represented by 135 bones including 15 individuals, in the ~~Academy~~ Academy material. It is scantily represented, also in the Museum collections, ~~and~~ having been listed by Miller (1925, p. 73) as Branta?, sp.

Anas platyrhynchos, } Previously questionably identified, now definitely
Nettion carolinense, } identified in both the So. Calif. Acad. and Museum material. (Miller L.H. 1925, p. 72)

Buteo lagopus, two tarsi and a femur from the Academy excavation. I have been unable to find this species in the collections from the Museum pits.

Buteo regalis, well represented in both the Academy and several Museum pits.

Fulica americana, tibia no. F142, from pit 4.

Squatarola squatarola, several specimens in the Academy and Museum pits. Tarsus K1135 or K1125 (# not clear)

Totanus melanoleucus, several specimens in the Academy and Museum pits. tarsi, tibia, humeri Tarsi K1115, K1116.

Recurvirostra americana, five specimens from the Academy excavation.

Cryptoglaux acadica, tarsus no. K1180 from pit 36.

The following are doubtfully identified:

Branta nigricans, in the Academy material

Chen rossi, in the Academy material. Both this species and B. nigricans may be present in the Museum material also.

Nyrocinae, two species from the Academy excavation, ~~one~~ one larger than Nyroca americana, one smaller than Nyroca marila.

Egretta thula?, several specimens from the Academy excavation compare

* New to the fossil record.
† Only previous prehistoric record from Shelter Cave new mex/doubtfully Pleistocene

favorably with this species, though with scanty comparative material it is impossible to make deifinit distinction between this species and Florida caerulea and Hydranassa tricolor. A tarsometatarsus from L.A.M. pit 61 was previously recorded as Florida caerulea? (Howard, 1929, p.251) This may possibly belong to the same species as the bones in the Academy pit, though it seems somewhat more slender.

Rissa tridactyla, a coracoid from the Academy excavation compares perfectly with a modern specimen of this species, but in view of the overlapping which occurs among the species of gulls, the identification is tentative.

~~Xeophloeus pileatus~~

Larus brachyrhynchus?, a humerus, no. G647 previously mentioned by Miller as Larus, sp. has been found to coincided with this species as to size.

Ceophloeus pileatus, a tibiotarsus from pit 16

To the ~~six~~ few species listed above as possibly peculiar to the Academy excavation, there should be added Mycteria wetmorei, recently described (Howard) from that locality. There is however, no marked difference in the species from this excavation and those recorded from Rancho La Brea in general. On the other hand, there is considerable difference in the relative abundance of these species.

The following major differences may be noted when comparison is made with the census of Rancho La Brea as previously presented by this writer (1930)

	So. Calif. Acad.	previous census
Anseriformes	22.1%	2.5%
Charadriiformes	6.6	1.3
Ciconiiformes	4.0	0.9
Falconiformes	4013	60.3

The discrepancy in the number of falconiforms in the Academy pit is due largely to a lesser number of individuals of Aquila chrysaetos. Why this should be, it is difficult to explain. The other large eagles are well represented, including two individuals of the rare Wetmoregyps daggetti, hitherto taken in but two other excavations (L.A.Mus. pit 4, and a University locality). There is a decrease also in the number of cathartid and teratornithid vultures, though less marked than with the Golden Eagle. This may probably be accounted for by the habits of the vultures in the matter of approaching their food, walking up to it, rather than alighting upon it. The presence of water thus would be a deterring factor.

Mention has been made of a few species occurring in the

Branta minuscula; this species was described by Wetmore (from a proximal end of humerus taken in Upper Pliocene (Lower Pleistocene?) bed near Benson, Arizona. Twenty humeri in the Academy excavation and three from Pit 16 are assignable to this species. To determine this fact, comparisons were made with a cast of the type ~~of Branta minuscula~~, for which I am indebted to Dr. Wetmore and the United States National Museum. To clear up one or two questionable points which the cast could not show, Dr. Wetmore very kindly compared a representative series with the type itself. He concurs in the opinion that the Rancho La Brea bones are Branta minuscula.

Several ulnae, femora, carpometacarpi, coracoids, tibiotarsi, and tarsometatarsi ~~of a small goose~~ are also present ~~also~~ and there seem to be no doubt but that they belong with the humeri assigned to B. minuscula. In the Academy excavation there are 135 specimens representing at least fifteen individuals. The species is scantily represented also in a few of the Museum pits, and ~~undoubtedly~~ includes also the specimens in the University of California collections which Dr. Miller has recorded as Branta, (?) sp. (Miller, L., 1925, p. 73)

Brief examination of the abundant material now available indicates possible relationship with some form other than Branta or at least adaptations differing from the modern races of that genus. Certainly the species warrants detailed study and should prove of unusual interest. Few fossil geese have heretofore been know from more than a single element.

The gruiforms of the Academy pit include Grus canadensis only, with four individuals. This number is exceeded in three Museum pits, each of which contained two species and five or six individuals. The shorebirds are scantily represented in all pits with the exception of th Academy and pit 16. In the former were twenty-two individuals representing nine species, in the latter fifty-five individuals of ten or more species. It is due only to this large representation of charadriiforms that pit 16 surpasses the Academy excavation in number of waterbirds.

The Academy pit was located on the north bank of what is now the "lake" near Wilshire Blvd. This area was so rich in asphalt that it was extensively excavated for commercial purposes before the importance of the contained bones was recognized. Later, scientific work was (beside the Academy locality) lucrative along the borders of the "lake", and included excavations by the Los Angeles High School and University of California. The Los Angeles Museum still later reworked some of the old diggings and sank a new shaft in the center of the lake as well. Practically all material at this time found, however, was thoroughly rotted by contact with water. None and of the bird material in the Museum collections, to which I have referred in this paper, was taken in this area. The depression left by these various excavations covers an area of roughly 150 x 350 feet. A good portion of it still contains considerable seepage of asphalt, covered shallowly with water and bordered with tules, giving the appearance of a pond or small lake, in which small forms are even now frequently entrapped. ~~It is not unlikely that~~ the situation ~~was~~ may have been similar during the Pleistocene, with the greater asphalt accumulation producing a more effective trap. Such a situation, though possibly attractive to diving birds on sight, would not be expected to bring these fish-eating forms in any large numbers. The evidence as supplied by the avifauna fits in to this picture ~~nicely~~. Three species of typical deep water birds are very scantily represented, the swan and two memeber of the Nyrocinae. All other species are such as would be attracted to shallow ponds or mar

A comparison has been made of the wtaerbird content of the individual Museum pits with that of the Academy excavation. This comparison shows that Pit 16, from which one of the largest collections of bird bones was obtained, surpasses the Academy pit in actual number of indivudual waterbirds, (Academy excavation, 99 total; Pit 16, 126). However, relative to the total number of birds, the percentage is far less in the Museum pit[1]. Pit 4, another locality in which bird remains were unusually abundant, contained less than half the number of aquatic birds as were taken from the Academy locality, (total of 41 individuals); Pits 3, 13 and 36 contained, respectively, 21, 20 and 18 individual waterbirds; the ten other Museum pits in which aquatic birds were represented, included from one to nine individuals only.

[1] Although I have not made a complete count of the number of bird bones in Pit 16, the combined totals for only two species (Parapavo californicus and Coragyps occidentalis) is slightly greater than the total number of bones of all species in the Academy pit.

The orders represented in this comparison included the Colymbiformes, Ciconiiformes, Anseriformes, Gruiformes and Charadriiformes. The grebes are known with certainty only from Pit 16, none were found in the Academy material. The ciconiiforms were only slightly better represented, with 12 individuals and seven species in the Academy locality, surpassing even Pit 16. Of the anseriformes, the ducks were most abundant of the Academy pit in number of individuals and number of species (eight or more species, and 31 individuals) and included two diving ducks of the subfamily Nyrocinae. The number of individuals was equalled in Pit 16, but the two nyrocine forms appear to be absent. The geese in the Academy pit total 29 individuals and about six species, exceeding by seven the number in Pit 16 and in Pit 4. The number of species is probably six, as in Pit 16. Except for a questionable occurrence in Pit 81, the Academy locality is unique in including one swan.

In the time that has elapsed since the last general work on the Rancho La Brea birds (Miller, 1925) there have been several published additions and changes in the record, so that it seems fitting at this time to present a complete list of the known forms as recorded to date. Several of the records were based on University of California specimens. However, with the exception of the passerines ~~Cathartornis gracilis and Astur atricapillus~~, I have checked every species in the list and find that only Cathartornis gracilis and Astur atricapillus are missing in the Los Angeles collections. The absence of Cathartornis gracilis is in contradiction to previous records (Miller, 1925, pp. 84-86). A complete explanation of this will appear in a paper on the La Brea vultures which is now in manuscript (Howard, MS). It is sufficient here to state that Dr. Miller and I are in agreement that the specimens in the Los Angeles Museum collections heretofore recorded as of this species cannot be so assigned. As the hawks in the Museum collections have not been thoroughly studied, it is not improbable that Astur may be found later. A complete survey of the passerines in the Museum collections is in process of preparation by Dr. Alden Miller.

* Phalacrocorax auritus, proximal end of humerus from no G-1847 Pit 10, Nat. Pits. The deposits in Pit 10 may be of later accumulation than the other excavations. In this pit were found the only human bones recovered from Rancho La Brea. See for account of this Pit

The species of ~~waterbirds~~ include the ~~following:~~

	number of bones in Acad area		number of indivs. from Acad area	indivs. in all other Museum pits combined	
Ardea herodias	14		2		
Egretta thula? or Florida caerula	14		3		
Botaurus lentiginosus	4		1	3	
Ciconia maltha	23		3	28	
Mycteria wetmorei	2		1	0	
Mycteria americana?	1		1	0	
Plegadis guarauna	3		1	1	
Cygnus columbianus	2		1	1?	
Branta canadensis	26				
Branta nigricans?	1				
Chen hyperboreus	10				
Chen rossi?	3				
Anser albifrona	7	Geese	29 total of all geese including Pigmy	74	10
Pigmy goose	135				
Goose misc. species	111				
Anas platyrhynchos	21				
Mallard or Pintail	64				
Chaulelasmus streperus	14				
Nettion carolinense	10				
Querquedula, sp.	7	Ducks	31	41	6
Teal, misc. sps.	43				
Nyroca, valisineria?	5				
Nyrocinae, gen., sp.	2				
Duck, misc. sps.	79				
Totanus melanoleucus	17		5		
Oxyechus vociferus	5		2		
Sandpipers 2 species	16	Charadriiformes	6 or 2		

Miller, 1912	Miller, 1925	Later records
	~~Colymbus~~	~~Podilymbus~~
	Colymbus? LAM. Hum.	
Chaulelasmus streperus		
	Anas platyrhynchos?	Spatula clypeata
Anser albifrons?	Nettion carolinense?	
Branta canadensis	Branta canadensis	
	Branta? sp. UC.	
Ciconia maltha	Ciconia maltha	
	Ajaia ajaja? LAM. Hum.	
Jabiru mycteria	Jabiru near mycteria	
	Plegadis guarauna 67	
Mycteria americana	Mycteria americana?	Mycteria wetmorei and?
		Nycticorax nycticorax
		Florida caerulea?
Ardea herodias	Ardea herodias	
	Botaurus lentiginosus? Form LAM.	
Grus minor	Grus minor invalid	
	Grus near americana	
Grus canadensis		
Lophortyx sp.	Lophortyx californica?	
Meleagris?		
Pavo californicus	Parapavo californicus	
Gymnogyps californianus	Gymnogyps californianus	
Sarcorhamphus clarki	Sarcorhamphus clarki	
Pleistogyps rex	out	
Cathartornis gracilis	Cathartornis gracilis	
Cathartes aura	Cathartes aura	
Catharista occidentalis	Catharista occidentalis	
Teratornis merriami	Teratornis merriami	
Elanusleucurus	Elanus leucurus	
		Astur atricapillus
Circus hudsonius	Circus hudsonius	
	Accipiter cooperi?	
Circus, sp.		
	Accipiter velox	
Buteo , sp.	Buteo sp.	
Buteo borealis	Buteo borealis	
	Buteo swainsoni	
Aquila chrysaetos	Aquila chrysaetos	
Haliaetus leucocephalus	Haliaeetus leucocephalus	
Morphnus woodwardi	Morphnus woodwardi	
	Morphnus daggetti	Wetmoregyps daggetti
Geranoaetus grinnelli	Geranoaetus grinnelli	Spizaetus grinnelli
Geranoaetus fragilis	Geranoaetus fragilis	Urubitinga fragilis
	Falco mexicanus	
Falco peregrinus		

	Neophrontops americanus
	Neogyps errans
Falco, sp.	Falco sp.
	Falco columbarius
Falco sparverius	Falco sparverius
Polyborus tharus	Polyborus cheriway
Aluco pratincola	Aluco pratincola
Asio flammeus	Asio flammeus
	Asio wilsonianus
Otus asio	Otus asio
	Strix brea
Bubo virginianus	Bubo virginianus
Speotyto cunicularia hypogaea	Spetotyto cunicularia
	Glaucidium gnoma
Neomorpha,? sp.	
	Geococcyx near californinaus
Colaptes cafer	Colaptes cafer
	Asyndesmus lewisi
Otocoris alpestris	
	Zenaidura macroura
	Columba fasciata
Corvus corax	Corvus corax
Corvus brachyrhynchos	Carvus brachyrhynchus
Corvus, sp.	
Xanthocephalus xanthocephalus	
Agelaius gubernator	
Sturnella neglecta	Sturnella neglecta?
Pipilo, sp.	
Lanius ludovicianus	Lanius ludovicianus
	Limnodromus griseus
	Oxyechus vociferus
	Numenius americanus
	Phaeopus hudsonicus

Tule Marsh

Ardea Herodias - grasshoppers etc. in dry stubble fields

Ciconia maltha ditto on pampas of Argentina

Egretta Thula marshes etc.

Botaurus - Tule Marsh, secluded bays & swamps, meadows edges of shallow muddy ponds

Nycticorax - Shallow, muddy ponds, marshes, sloughs

Plegadis Shallow margins muddy ponds, ponds, marshes

Cygnus col. "A bird little given to wandering for from water deep enough to float it freely."

Anas - versatile & adaptable. Often in limited & ephemeral ponds areas, inc. canals, ontspreading waste water, temporarily flooded fields or weed patches

Chaulelasmus

Nettion

Querquedula

puddles; Certainly indicates water but not necessarily in large amounts

Nyroca (affinis in Mex. 2)

Anas - grain fields - stubble, ponds

13-3 A. cooperi - primarily woods or marsh land"

9-2 B. bor. "hunters of the open country.

8-2 B savana

19-3 Circus "fits into picture reconstructed of Mex. landscape"

Polyborus open country or dense forest

T. mex limited in great open spaces (near Tampico)

Sphenoxycalis. - low, sparse cover in near vicinity

Sus canadensis - flat plains country (a part for open water)

Fulicaidea — open country birds

Geococcyx - low sparse cover in vicinity (mainly ground not to dense, like, flat cover & drinking water)

Speotyto — terrestrial burrows in terrain devoid of trees independent of free nat. water supply - "estimated to suit for insect prey"

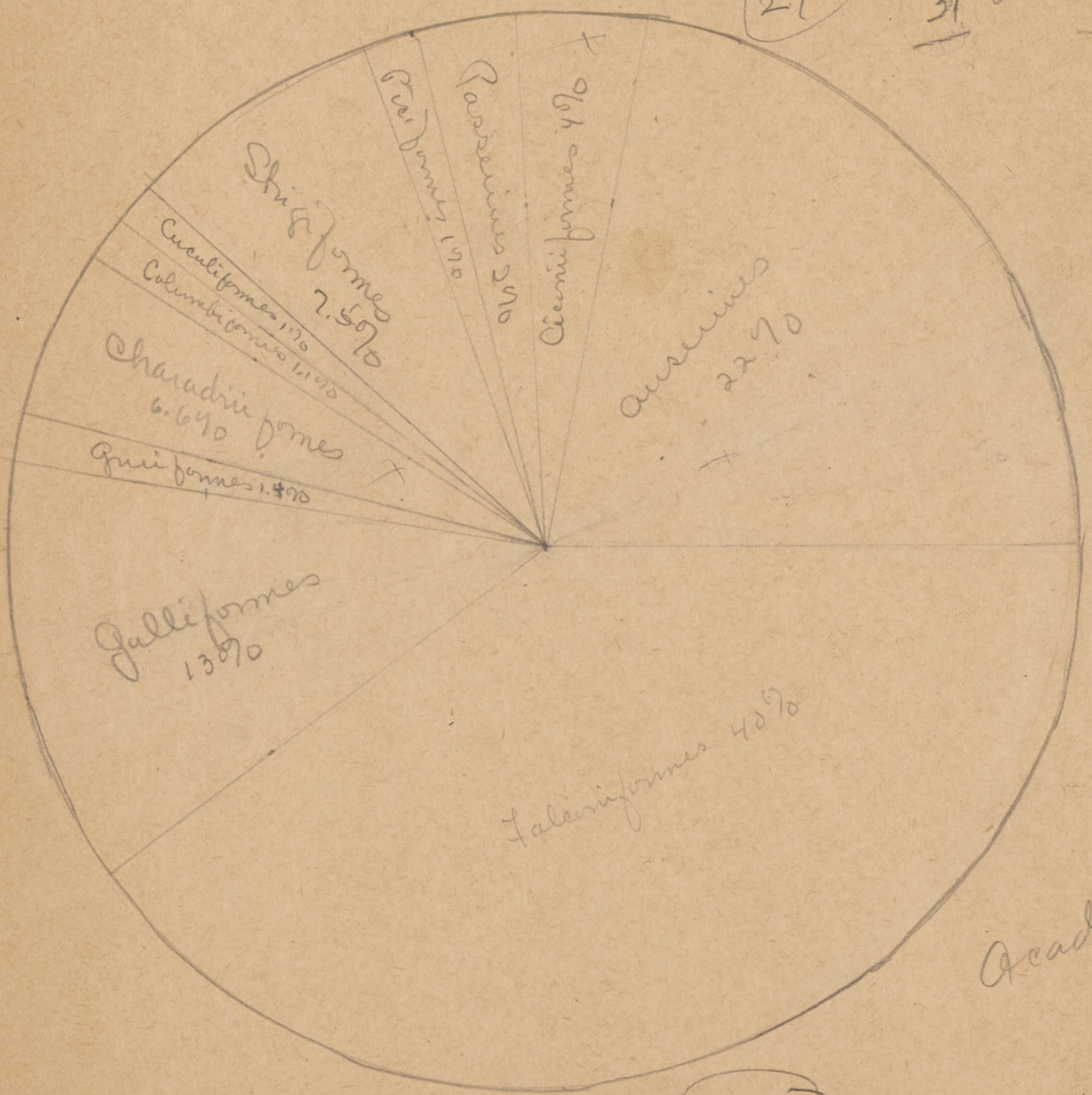
Asio wil - scrub near for refuge.

Ddamus
Reminosha
Asio flammeus
Cinclund
Bos. lenytes
Andea

} Tule Marsh

Lophortyx
a coop.
Geo

} Chaparral



16
22
27

29 geese
31 ducks

74
38 ducks
27

11
14.4

Acad Pat

27

Woodland

minima

8 5 98 ♂ 74.5 13.2

8 7 7 ♀ 66.4 12.3

8 5 8 8 ♂ 70.4 12.9

gg. Dendrocygna

6 8 8 7 ♀ 57.5 10.3

8 9 9 8 ♂ 65.1 11.) B. mg.

---

min. chins

♀ 62.4 13.5

♀ 61.3 12.7

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mig. chins

♀ 59.0 12.2

♂ 63.8 13.5

♂ 60.1 12.9

53.7 D. bicolor

♂ 56.3

♂ 56.4

♀ 52.7

♀ 55.5

♂ 58.3 D. aut.

♂ 60.5

reper & Carnegie, (Miller)
p 73 re-Brisantaeſp.

Quantidad reported before

Alden - Spatula clypeata ?
Mallard (ref. to Miller)
Nettion (" " ")

13
3
16

S. Calif. Acad.

✓ Geese ○
Genus of Branta ~~Anser~~

Tarsi 9

X Branta nigricans: Miller p. 73
Tarsi 3

Branta c. minima
Tarsi 2

X Dendrocygna
Tarsi 3,

Nettion carolinense Miller Carnegie, Alder Condor 1929 2 2 4
Humeri 5

✓ Anas platyrhynchos Miller, Carnegie, Aldrich above

Nyroca ? (scamp— or Redhead of Canvasback?
humerus 1

✓ Ducks
74 large hum. } 2, probably 3 spp. (including Anas
24 small " } ducks
← includes Nettion 5 — and the two groups
Cyanoptera 2 likely to be the same spp.
— thus only 2 spp.

✓ Oxyura columbiana - White-kneed Duck
1 carpus
1 femur?

✓ 14 large tarsi genera Branta can. can ?, at least one Bohn, ~~Anas~~
11 small " " Probably B. can. min, Br. nig ? Dendrocygna.
2 3

✓ Aechmophorus? 1 humerus

Mallard
Humeri - 7 — 7 OK

Pintail
Humeri 2

Greenwinged Teal — 7 OK
Humeri 5

Canvasback or Redhead
Humerus 1

✓ Numenius amer.
Hum. 1, cora 1

✓ Charadrius
Hum. 1, ulna 1, cora. 1?

✓ Sandpipers
humeri 4, ulna 3

✓ Oxyechus?
tibia 1, humeri 1,

✓ Larus (size of delawarensis or heermanni)
cora 1

Geese
23
1 + 1 = 7
1 1

Ruddy
28
34 1/2
21 1/2
23
23
7
1
28
29
31 1/2
4
20
31
36 ?

S. Cal. Acad.

Crane

Humerus IIII Tibia IIII II ulna IIII
coracoid IIII II Tarsus IIII Scap II
Femur IIII Carpus I Radius I

Storks. Cicconia malena

Tarsus IIII carpus III Tibia IIII
Coracoid II Radius III Femur III

Geococcyx californianus Roadrunner

Femur I Tibia I Coracoid
Humerus II

Lophortyx californica Quail

Femur IIII II Tibia IIII III Coracoid II
Humerus IIII II ulna I Tarsus I

Pandion californianus Calif. Turkey

328 (Misc)

Buteo lagopus
Tarsi 2 Tibia 5?

Buteo swainsoni
Tarsi 2 humerus I

Buteo regalis
Tarsi 6 Tibia 2 humerus 2

Buteo borealis
Tarsi 3 Tibiae 2 humeri 2 carpus I?

Accipiter cooperi

Circus hudsonius
Tarsus 1 humerus 3

Tarsus 2 Tibia 3 humerus I

328/270

Vultur clarki

Cranium 1 | Tibia 11 | Tarsus 1
Coracoid 1 | Hum. 1

Teratornis

Ulna IIII | Tibia III | Femur III
Coracoid II | Tarsus 1 | Scap. 1
Radius IIII

Cathartes aura

Tarsus 1 | Carpus 1

Coragyps sc.

Humerus IIII IIII | Tibia III IIII IIII IIII | Cora. II IIII IIII
Femur IIII I | Tarsus IIII IIII I | Carpus IIII II
Radius IIII IIII IIII | Ulna IIII IIII I | Scap IIII
IIII IIII I

Gymnogyps

Coracoid IIII II | Carpus III | Tibia IIII IIII
Tarsus IIII IIII IIII IIII | Femur IIII III | Humerus IIII
Scap III

S. Cal - Acad.

Neogyps errans

Tibia II	carpus IXI	humerus II
coracoid III	Tarsus III	femur III
ulna I	radius II	

Spizaëtus ginnelli

humerus IXX	Tibia IIII	carpus IXXX I
Tarsus IXX IIIIIII	coracoid IXX	ulna II
femur III	scap I	radius III

Urubitinga fajilis

Tarsus II	radius I	carpus I
femur II	ulna III	humerus IIII

Neohierogyps dagetti

Tarsus IIII	femur I	ulna I
Coracoid II	tibia I	

Neoplitonogyps

humerus IXIIXX	Tibia IXXI
femur IIII	scap II
Tarsus IXX IXXIXX II	carpus II
Ulna IXX IIX	coracoid IXXII

Morphnus woodwardi

Tarsus I scapa I

Aquila chrysaëtos Golden Eagle

Tarsus 39

Other elements 93

Haliaeetus leucocephalus

108 (mine)

✓ Falco sparverius

Humerus //// Tibia / Femur //

Ulna // Carpus //

✓ Falco mex.

Humerus / Tibia // Femur /

✓ Falco peregrinus ? small

Tibia // also a small and 2 small ulnae

humerus Cyrtonyx columbianus

✓ Polyborus cheriway

Femur |||| |||| |||| |||

Tarsus |||| |||| |||| |||| |||| ||||

Tibia |||| |||| ||

Scap ||| radius |||| ||

Coracoid |||| |||| |||| |||| |

Humerus |||| |||| |||| ||||

ulna |||| |||| |||| |||| ||||

carpus ||

68
69
137

46.8 5.4 11.5%

46.1 4.2 9.3

44.4 4.4 9.8

42.0 5.1 12.1

40.0 4.6 11.5

43.9 4.7 10.8

✓ Squatarola squatarola - Black-bellied Plover
1 Tibia (?. may be golden)
1 Humerus

~~Pluvialis dominica? - Golden Plover~~
~~2 Femora~~

✓ Phaeopus hudsonicus - Hudsonian Curlew
1 Ulna
1 Humerus
1 Coracoid

✓ Recurvirostra americana - Avocet
2 Carpi
1 Humerus
1 Tarsus
1 Femur

✓ Totanus melanoleucus - Greater Yellow-legs
1 Humerus
2 Tibiae
3 Tarsi
1 Carpus
2 Femora
1 Ulna

✓ Numenius americanus - Long-billed Curlew
1 Humerus
1 Coracoid
1 Femur ?
1 Tarsus ?

✓ Oxyechus vociferus
3 humeri
1 ulna
1 tibia
At least TWO more species probably sandpipers
(6 humeri, 2 ulnae) ← 1 tibia ? → (3 ulnae, 4 humeri)

~~Strix brea ?~~

Spedyto cuniculata Burrowing Owl
Tarsus IIII Tibia III

Otus asio
Tarsus I

Asio Canadensis
Tarsus IX/IX/II Humerus IIII
Femur I Tibia IX/II
Carpus III coca. III/II. scap I

Nyctalbea Barn Owl
Tarsus IX/IX/IIII Femur IX
Tibia IIII Humerus IIII
Coracoid IIII ulna II Carpus II

Bubo virginianus
Tarsus III/III scap. III Tibia I/IV coca II
Humerus IX/I ulna III Femur III scap II

Strix brea ?
Tibia II Humerus I

Colaptes caper
Coracoid I

Pica pica hudsonius – Yellow-billed Magpie
humerus I
coracoid I

Zenaidura macroura – M. Dove
humerus III Coracoid I

From So. Cal. Acad. Pt

✓ Totanus melanoleucus Greater Yellowlegs
Tarsi III , Tibia I
Humeri IIIIII

✓ Recurvirostra americana - Avocet
Tarsus I ; humerus I

✓ ? Limosa fedoa Marbled Godwit
Tarsus I , femur I ? (maybe Numenius)

✓ Mycteria ~~americana~~ Wood Ibis
carpus I ~~scapula I~~
Tarsus I Lower mandible frag - I

✓ Himantopus - Stilt
Humerus I

Herons

✓ Ardea Herodias
Coracoid II ; Tarsus I ; ulna II
carpus II femur I ; scapula I
radius II Tibia II

✓ Gloriola or Egretta
Tarsus IIII (or 4) ; ulna ~~III~~
humerus I ; carpus II
Tibia I

✓ Plegadis guarauna glossy Ibis
coracoid I ; scap. I ; ulna I

✓ Botaurus lentiginosus Bittern
Tarsus II ; Tibia II

Ciconiiformes 66
Ardeidae 41
Ardea 13
Egretta? 14
Botaurus 4
Ciconiidae 22
Ciconia 19
Mycteria 3
Threskiornithidae 3
Plegadis 3

Anseriformes 544
Anatidae 544

Falconiformes 316
Cathartidae 195
Cathartes 2
Coragyps 114
Gymnogyps 53
Vultur 6
Pandionidae 22
Accipitridae 123
Neophron 21
Neophr. 58
Numida 38+
Spiz. 42
Ac. 132
Hal. 108
Urub 13
Wet 9
Morph 2
Falconidae 195
Polyborus 137
Falco sp. 4
" peregr. 3
" sparv. 11

Galliformes 355
Perdicidae 27
Phasianidae
Meleagridae
Pavo cristatus 328

Gruiformes 38
Gruidae 38

Charadriiformes 32
Charadriidae 9
Scolopacidae 19
Numenius 2
Phaeopus 3
Totanus 12
Limnodromus 2
Recurvirostridae 3
Recurvirostra 2
Himantopus 1

Laridae 1

Columbiformes 4
Columbidae 4

Cuculiformes 57

Strigiformes 108
Tytonidae 35
Strigidae 73
Bubo 1
Bubo 31
Strix 7
Strix 3
Otus 31

Piciformes 1

Passeriformes 2

Records for La Brea

Miller, L. H.
1925. The Birds of Rancho La Brea. Carnegie Inst. of Wash. Pub. no 349, pp. 63–106
6 plates, 20 figs. in text.

Miller, Alden
1929 Additions to the Rancho La Brea Avifauna. Condor, vol 31 pp 223–224.

Limnodromus griseus
Oxyechus vociferus
Oxyprion lewisi
Spatula clypeata ?

old recs. mentioned Jamaica
Ne. Georgia
Ontario

Howard, H.
1929 Additional Bird Records from the Pleistocene of Rancho La Brea. Condor, 31 pp 251–252

Florida caerulea?
Nycticorax nycticorax

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New Bird Records from the Pleistocene of Rancho La Brea. Condor vol. 36, pp 221–222.

Actur atricapillus
Numenius americanus
Phaeopus hudsonicus

Miller, L. H. Contributions to Avian Paleontology from the Pac. Coast of N. Am. Univ. Calif. Pub. Bull. Dept. Geol. vol. 7, pp. 61–115. La Brea, pp. 75–78 (T 112)